

IN THE CLAIMS

1. (Currently amended) A decoder comprising: base-layer components that are configured to decode a base-layer input stream, and to produce therefrom a base-layer output stream, enhancement-layer components that are configured to decode an enhancement-layer input stream, and to produce therefrom information that supplements the base-layer output stream to provide an enhanced output stream, and a controller, operably coupled to the enhancement-layer components, that is configured to control the decoding of the enhancement-layer input stream, based on a user-defined subset of the base-layer output stream;

wherein the base-layer input stream corresponds to an encoding of a series of image frames, and the defined subset of the base-layer output stream includes a defined region within the image frames that is smaller in size than the image frames.

2. (Canceled)

3. (Currently amended) The decoder of claim 12, wherein the enhancement-layer input stream corresponds to at least one of: a spatial enhancement, a temporal enhancement, a data enhancement, and a signal-to-noise enhancement.

4. (Previously presented) The decoder of claim 3, wherein the temporal enhancement includes MPEG B-frames.

5. (Currently amended) The decoder of claim 12, further including a second controller that is configured to extract at least a portion of the enhanced output stream and the base-layer output stream for rendering to a display device.

6. (Currently amended) The decoder of claim 12, wherein the base-layer components include: a base-layer variable-length decoder that is configured to provide a series of DCT encodings from the base-layer input stream, an inverse discrete-cosine-transform, operably coupled to the base-layer variable-length decoder, that is configured to provide

direct-coded pixel values and error-term values corresponding the series of DCT encodings, a motion compensation device that is configured to receive motion vectors corresponding to prior pixel values and to produce therefrom translated pixel values, and a summer that is configured to combine the translated pixel values and the error-term values to produce motion compensated pixel values, and wherein the base-layer output stream includes the direct-coded pixel values and the motion compensated pixel values.

7. (Previously presented) The decoder of claim 6, wherein the enhancement-layer components include: an enhancement-layer variable-length decoder that is configured to provide a series of enhancement DCT encodings from the enhancement-layer input stream, an enhancement inverse discrete-cosine-transform, operably coupled to the enhancement-layer variable-length decoder, that is configured to provide enhancement values corresponding the series of enhancement DCT encodings, and a second summer that is configured to combine the enhancement values to the base-layer output stream to produce the enhanced output stream.

8. (Previously presented) The decoder of claim 6, wherein the enhancement-layer input stream corresponds to an enhancement frame, and includes motion vectors relative to the base-layer input stream, and the enhancement-layer components include an interleaver that is configured to insert the enhancement frame into the base-layer output stream to produce the enhanced output stream.

9. (Previously presented) The decoder of claim 1, further including a user interface, operably coupled to the controller, that is configured to facilitate identifying the defined subset.

10. (Previously presented) A image processing system comprising: a camera system that is configured to provide a base-level input stream and a corresponding enhancement-level stream, a base-level decoder that is configured to provide a base-level output stream corresponding to the base-level input stream, an enhancement-level decoder that is configured to provide an enhancement stream corresponding to the enhancement-level

stream, a combiner that is configured to combine the enhancement stream to the base-level output stream to produce an enhanced output stream, and a controller that is configured to control the enhancement-level decoder to selectively decode the enhancement-level stream to provide the enhancement stream, based on a defined region of a field of view of the camera system.

11. (Previously presented) The image processing system of claim 10, wherein the defined region of the field of view is based on at least one of: a user selection, a location parameter, a pattern recognition, and a color recognition.

12. (Currently amended) A method of providing an enhanced output stream, comprising: receiving a base-layer input stream, receiving an enhancement-layer input stream, decoding the base-layer input stream to provide a base-layer output stream, selectively decoding the enhancement-layer input stream, based on a user-defined subset of the base-layer output stream, to provide an enhancement output stream, and combining the base-layer output stream and the enhancement output stream to provide the enhanced output stream;

wherein the base-layer input stream corresponds to an encoding of a series of image frames, and the defined subset of the base-layer output stream includes a defined region within the image frames that is smaller in size than the image frames.

13. (Canceled) The method of claim 12, wherein the base-layer input stream corresponds to an encoding of a series of image frames, and the defined subset of the base-layer output stream includes a defined region within the image frames that is smaller in size than the image frames.

14. (Currently amended) The method of claim 12, wherein the enhancement-layer input stream corresponds to at least one of: a spatial enhancement, a temporal enhancement, a data enhancement, and a signal-to-noise enhancement.

15. (Previously presented) The method of claim 14, wherein the temporal enhancement

includes MPEG B-frames.

16. (Currently amended) The method of claim 123, further including extracting at least a portion of the enhanced output stream and the base-layer output stream for rendering to a display device.

17. (Currently amended) The method of claim 123, wherein decoding the base-layer input stream includes: decoding variable-length bit streams in the base-layer input stream to provide a series of DCT encodings, decoding, via an inverse discrete-cosine-transform, the series of DCT encodings to provide direct-coded pixel values and error-term values, receiving motion vectors corresponding to prior pixel values, producing translated pixel values from the prior pixel values, and combining the translated pixel values and the error-term values to produce motion compensated pixel values, and wherein the base-layer output stream includes the direct-coded pixel values and the motion compensated pixel values.

18. (Previously presented) The method of claim 17, wherein decoding the enhancement-layer input stream includes: decoding variable-length bit streams in the enhancement-layer input stream to provide a series of enhancement DCT encodings, decoding, via an enhancement inverse discrete-cosine-transform-, the series of enhancement DCT encodings to produce enhancement values, and combining the enhancement values to the base-layer output stream to produce the enhanced output stream.

19. (Previously presented) The method of claim 17, wherein the enhancement-layer input stream corresponds to an enhancement frame, and includes motion vectors relative to the base-layer input stream, and interleaving the enhancement frame into the base-layer output stream to produce the enhanced output stream.

20. (Previously presented) The method of claim 11, further including providing a user interface to facilitate identifying the defined subset.